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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,583	11/20/2001	Stephen Todd	07072-146001	9738
51576 7590 04/11/2007 EMC CORPORATION c/o DALY, CROWLEY, MOFFORD & DURKEE, LLP 354 ATURNPIKE STREET SUITE 301A CANTON, MA 02021-2714			EXAMINER LESNIEWSKI, VICTOR D	
			ART UNIT 2152	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/989,583

Applicant(s)

TODD ET AL.

Examiner

Victor Lesniewski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17, 19, 20 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19, 20 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/12/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The amendment filed 2/15/2007 has been placed of record in the file.
2. Claims 1, 19, and 20 have been amended.
3. The rejection of claims 1-17, 19, and 20 under 35 U.S.C. 112 is withdrawn in view of the amendment.
4. Claims 24-26 have been added.
5. Claims 1-17, 19, 20, and 24-26 are now pending.
6. The applicant's arguments with respect to claims 1-17, 19, 20, and 24-26 have been considered but are moot in view of the following new grounds of rejection.

### ***Information Disclosure Statement***

7. The IDS filed 1/12/2007 has been considered.

### ***Response to Amendment***

8. Claims have been amended to show the use of network addresses of equipment used by the customers. The amendment proves a change in scope to the independent claims as the independent claims now explicitly state that the customer information includes network addresses of equipment used by the customers. However, none of the amended claims show a patentable distinction over the prior art as evidenced by the following new grounds of rejection.

### ***Claim Objections***

9. Claim 26 is objected to because of the following informalities:

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- Claim 26 states “the system of claim 26” where it is believed the applicant meant to state “the system of claim 20”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-5, 8-11, 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Aziz et al. (U.S. Patent Number 6,779,016), hereinafter referred to as Aziz.

12. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a computer program product or a system are rejected under the same rationale applied to the described claim.

13. Aziz has disclosed:

- <Claims 1, 19, and 20>

A method of managing hardware resources, comprising: providing an executable software module configured to communicate with the hardware resources (column 4, line 54 through column 5, line 8); operating the executable software module to cause the executable software module to return information about the hardware resources (column 4, line 54 through column 5, line 8), wherein the information includes hardware

configuration information associated with the hardware resources (column 13, lines 16-22) and customer information associated with customers of the hardware resources, wherein the customer information includes network addresses of equipment used by the customers, allocation information indicative of allocations of the hardware resources to the customers and billable event information for use by a billing application to bill the customers and indicative of usage of the hardware resources by the customers (column 16, lines 23-46 where the system inherently includes the network addresses of the equipment as the addresses of the servers must be known in order for the system to properly track and report resource usage on the servers); and storing the hardware configuration information and the customer information in a database (column 16, lines 1-15).

- <Claim 2>

The method of claim 1, wherein the hardware resources comprise data storage resources (column 4, lines 23-41).

- <Claim 3>

The method of claim 2, wherein the data storage resources reside in a datacenter controlled by a storage service provider (column 4, line 54 through column 5, line 8).

- <Claim 4>

The method of claim 3, further comprising presenting the hardware configuration information and the customer information to an administrator of the storage service provider (column 5, lines 3-8).

- <Claim 5>

The method of claim 4, wherein the hardware configuration information comprises data storage resource attributes (column 13, lines 16-22).

- <Claim 8>

The method of claim 4, further comprising: generating a directory of the hardware resources; and storing the directory in the database (column 10, lines 58-67).

- <Claim 9>

The method of claim 8, wherein the executable software module comprises a set of methods (column 13, lines 16-36).

- <Claim 10>

The method of claim 9, wherein the methods include a first method that, when called, causes the executable software module to identify a type of hardware resource with which the executable software module is configured to communicate, and a second method that, when called, causes the software executable module to identify any hardware resources with which the executable software is configured to communicate (column 13, lines 16-36).

- <Claim 11>

The method of claim 10, wherein the methods further include a third method that, when called, causes the executable software module to poll the hardware resources identified by the executable software module to provide attribute information associated with the hardware resources (column 13, lines 16-36).

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- <Claim 17>

The method of claim 5, further comprising: adding a new data storage resource to the datacenter (column 8, lines 48-65); and placing the new data storage resource in a directory of hardware resources (column 11, lines 12-28).

Since all the limitations of the invention as set forth in claims 1-5, 8-11, 17, 19, and 20 were disclosed by Aziz, claims 1-5, 8-11, 17, 19, and 20 are rejected.

14. Claims 6, 7, 12-16, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz, as applied above, further in view of Nine et al. (U.S. Patent Number 6,560,611), hereinafter referred to as Nine.

15. Aziz disclosed a scalable server farm wherein a control plane operates to control the allocation and monitoring of the storage resources in the system. In an analogous art, Nine disclosed a network monitoring system for monitoring all services and conditions on various networks.

16. Concerning claim 6, Aziz did not explicitly state enabling the administrator to select which data storage attributes are to be stored. However, Aziz does give an administrator control of the system via the control plane whereby the administrator can view and manipulate the data storage attributes. In this type of environment, it was well known in the art at the time of the applicant's invention that a user with administrative access may decide which attributes are to be stored and make other such administrative decisions in the operation of the system. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's

invention to modify the system of Aziz by adding the ability to enable the administrator to select which data storage attributes are to be stored.

17. Concerning claims 24-26, Aziz did not explicitly state storing the customer information in a table wherein each entry in the table comprises three fields. However, Aziz does teach the usage of and the storage of customer information that includes an indication of an allocated hardware resource, addresses of the equipment associated with the allocated hardware resource, and an indication of the customer associated with the allocated hardware resource. See the discussion of claim 1 above. Since Aziz teaches the usage and storage of these items, it would have been simply a design choice as to how to store them in the database. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to store the customer information in a table wherein each entry in the table comprises three fields.

18. Concerning claim 7, although Aziz did not explicitly state the use of an executable software module with Java, Nine states the use of Java in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to utilize Java as provided by Nine. Here the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

19. Concerning claims 12 and 13, although Aziz did not explicitly state the use of XML to provide polling results, Nine states the use of XML in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to utilize XML as provided by Nine. Again the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.



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20. Concerning claim 14, although Aziz did not explicitly state returning a list of services to the user, Nine states this feature in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to return a list of services to the user as provided by Nine. Again the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

21. The above rationale also applies to those dependent claims utilizing the same combination.

22. Thereby, the combination of Aziz and Nine discloses:

- <Claim 6>

The method of claim 5, further comprising enabling the administrator to select, for a given data storage resource, which of the data storage attributes are to be stored in the database (obviousness as discussed above).

- <Claim 7>

The method of claim 1, wherein the executable software module comprises JAVA classes (Nine, column 9, lines 55-65).

- <Claim 12>

The method of claim 11, wherein results of the polling are provided in XML format (Nine, column 3, lines 37-48).

- <Claim 13>

The method of claim 11, wherein the results of the polling are provided in a format other than XML and the executable software module performing the polling converts the results of the polling to XML format (Nine, column 3, lines 37-48).

Furthermore, it is well known in the art to convert data into an alternate format in a network when needed.

- <Claim 14>

The method of claim 11, wherein the methods further comprise a fourth method that, when called, causes the executable software module to return a list of services and associated parameters (Nine, column 5, line 60 through column 6, line 8).

- <Claim 15>

The method of claim 14, wherein the methods further comprise a fifth method that, when called, causes the executable software module to execute a requested one of the services on a list of services (Nine, column 6, lines 9-20).

- <Claim 16>

The method of claim 15, wherein making a call to the fifth method comprises specifying values of parameters associated with the requested one of the services (Nine, column 6, lines 20-25).

- <Claims 24, 25, and 26>

The method of claim 1 wherein storing comprises storing the customer information in a table, an entry in the table comprising: a first field indicating an allocated hardware resource; a second field storing the addresses of the equipment associated with the allocated hardware resource in the first field; and a third field indicating the customer associated with the allocated hardware resource in the first field (column 16, lines 1-15 and 23-46, and obviousness as discussed above).

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Since the combination of Aziz and Nine discloses all of the above limitations, claims 6, 7, 12-16, and 24-26 are rejected.

### *Conclusion*

23. The applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987. The examiner can normally be reached on Monday through Thursday.

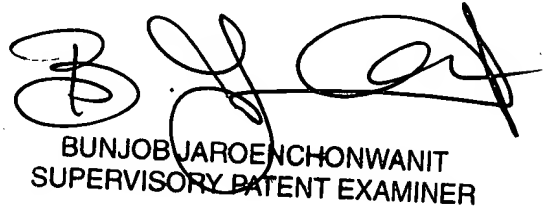
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Lesniewski  
Patent Examiner  
Group Art Unit 2152



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER